CHAPTER

6

Existing Conditions in Seattle's Potential Light Rail Station Areas

As part of the Seattle Station Area Planning effort, the existing conditions of each potential station area along the light rail corridor were examined in detail. This section provides an overview of existing conditions in the station areas and identifies overall opportunities and constraints for Station Area Planning as a whole. The station area profiles in Chapter 10 of this Report and in the Station Area Atlas provide a detailed description of conditions for each station area.

PURPOSE

The analysis of existing conditions identifies opportunities and constraints for transit-supportive development and provides a basis for recommending development strategies to improve the connection between each station and its surrounding area. Specifically, the analysis of existing conditions provides information to answer two critical questions:

- *Opportunities and Constraints.* Given the physical, socio-economic, and regulatory characteristics of station areas, and taking into account community concerns, what can be done to make station areas as supportive of transit as possible?

- *Development Strategies.* How can transit-supportive development be supported and implemented, given the existing plans and regulations for station areas?

STATION AREA CHARACTERISTICS

Existing conditions of station areas include their physical, socio-economic, and regulatory characteristics. Examining each of these characteristics helps identify opportunities, constraints, and development strategies. The analysis of existing conditions addresses the following questions about various station area characteristics:

- *Land Use.* What do existing land use patterns suggest about the types of uses, densities, and use configurations that can be used to support transit use in station areas?

- *Zoning and Opportunity Sites.* Based on the existing zoning, are additional measures necessary to encourage transit-supportive development on available sites?

- *Transportation, Parking, and the Pedestrian Environment.* What improvements in the ex-

isting transportation network are necessary to encourage transit use and allow for pedestrian and bicycle activity around stations, to and from surrounding areas?

- *Urban Design Opportunities.* What urban design improvements will help create station areas that are attractive, identifiable urban places and safe, comfortable pedestrian and bicycle environments?

- *Recent Development Activity.* What do current trends in the local real estate market suggest about the amount and type of development that can be supported in station areas from now until 2020?

LAND USE

Because new development in station areas should be compatible with existing land uses, while supporting light rail ridership, the analysis of existing use patterns gives an idea of what types of development can feasibly be introduced in station areas.

Types of Use

Land uses that characterize the station areas vary widely and are shown on the map on the next page. These land distributions suggest three general types of station areas:

- *Residential.* Some potential station areas, such as Alaska, are comprised almost entirely of housing. Stations surrounded by housing are likely to serve as major points of origin for commuters traveling to jobs located at other stations, such as Downtown or the University District.

- *Commercial.* Other station areas consist mostly of commercial uses. Commercial uses in Downtown station areas are mostly office uses; other stations have more industrial or retail uses. Stations with commercial development are likely to function as major work destinations. In some cases, however, the existing commercial development does not lend itself to transit use. This is true in station areas where the commercial land uses include auto-oriented uses (e.g., gas stations, drive-through businesses) or land uses with large parking lots and poor pedestrian infrastructure, such as Northgate Mall.

- *Public.* The University of Washington (UW) campus comprises a significant part of the three potential station areas located in the University District. Just as stations located in areas with abundant office uses attract transit riders, these stations would attract students and University employees who would use the light rail system. The stations would also serve as points of origin, because many students who live on campus do not have access to cars.

Mix of Uses

While some station areas have more established uses than others, all have a mix of other uses that support the primary uses. In some cases, the mix and arrangement of land uses in the station area can help support transit and pedestrian activity. At the potential Capitol Hill station, for example, ground-floor retail use mixed with high-density residential development can encourage residents to walk between their residences, local stores, and the light rail station.

Throw page – Existing Land Use Map

Intensity of Development

The potential station areas vary widely in their residential densities (See Table 6-1). Some have densities of less than 10 units per net residential acre, creating a low-density, suburban-like environment. Others located in more urban neighborhoods have residential densities that reach as high as 90 units per acre.

Table 6-1: Residential Densities and Commercial FAR

	Residential Density[1]		FAR[2]
	Single-family	Multi-family	
Northgate	0.0	6.80	0.29
Roosevelt (2)	8.70	40.50	0.47
Roosevelt (3)	6.40	23.40	0.38
Roosevelt (4)	5.30	26.70	0.27
NE 45th Street	N/A	7.13	0.20
Campus Parkway	N/A	14.86	0.09
Pacific Street	N/A	0.0	0.05
Broadway at Roy	2.50	63.20	0.40
Capitol Hill	N/A	77.70	0.97
First Hill	N/A	63.90	2.33
Eastlake	5.30	38.80	0.27
South Lake Union	N/A	N/A	0.84
Seattle Center	N/A	N/A	1.03
Convention Place	N/A	107.50	3.41
Westlake	N/A	N/A	6.56
University Street	N/A	0.0	8.15
Pioneer Square	N/A	0.0	7.10
International District	N/A	N/A	0.97
E3/Royal Brougham	N/A	N/A	0.27
Lander	N/A	N/A	0.58
Poplar Place	8.50	23.20	0.56
I-90 (21)	5.40	19.90	0.14
I-90 (28)	4.80	20.50	0.17
McClellan (22)	4.80	20.50	0.28
McClellan (23)	4.70	19.30	0.26
Beacon Hill	9.00	37.30	0.14
Rainier Valley Square	7.60	31.00	0.12
Genesee	8.10	12.00	0.14
Columbia City	9.60	19.80	0.24
Alaska	4.10	4.00	0.04
Edmunds	6.80	12.50	0.07
Graham	5.60	61.00	0.13
Othello	4.60	17.40	0.12
Henderson	3.70	19.90	0.07

1. Per net residential acre in residential zones.

2. Ratio of non-residential space per net acre of commercial and industrial land use.

Station areas with higher density development are likely to support greater transit use, walking, and biking. It is not necessary to have downtown residential densities to encourage transit use. Typically, densities with a minimum of 15 to 20 units per acre can support a light rail transit system. This suggests that the station areas south of Downtown that currently have residential densities lower than this threshold should be targeted for development strategies that could help these station areas meet the threshold.

Opportunities

In general, transit-supportive development does not require a drastic change in the existing land uses, densities, or land use patterns in the station areas. It is critical to remember that over the long term, gradual change *will* occur and that it can be directed toward more transit-supportive uses and densities. This process of incremental change can be made to maintain and enhance appropriate existing uses. This suggests three types of opportunities available to increase support for transit use and pedestrian activity:

- *Changes in Land Use.* Changes in land use that can help support transit activity include limitations on auto-oriented commercial development and restrictions on large-scale or exclusive parking uses. Moreover, a better mix of uses (e.g., ground-floor retail with housing above) can support and encourage transit use and pedestrian activity.

- *Increases in Residential Density.* Increased densities can also support transit and pedestrian activity. Moderate densities (15-20 units per acre) not as high as downtown can create appropriate levels of transit demand for a light rail system. Density incentives can be offered for mixed use or other transit-supportive development.

- *Increases in Commercial Floor Area Ratio (FAR) Intensities.* Floor Area Ratio (FAR) increased commercial intensities are associated with higher employment intensities, which are highly correlated with transit and HOV mode choice for work trips. FARs of 0.5 or more can create appropriate levels of transit ridership at major work destinations line downtown and university district.

ZONING AND OPPORTUNITY SITES

Opportunity sites for new development in the potential station areas were identified through analysis using the City's GIS database and then confirmed through field observations. With the exception of Pacific Street, each of the potential station areas includes multiple opportunity sites. As shown in Table 6-2, opportunities for development vary widely in each station area – from only a few acres to a substantial portion of a station area. For example, only two acres of opportunity sites were identified for the E3/ Royal Brougham station area, whereas more than 42 acres—over 1/3 of the station area—were identified as opportunity sites in the Northgate station area.

Zoning

Opportunity sites are found in different zones, including general commercial and neighborhood commercial zones; single-family, low-rise, mid-rise, and high-rise residential zones; and the Major Institutional Overlay (MIO) zones. These zoning categories vary in their support of and sensitivity to transit-related activities. Zoning in many station areas includes:

Table 6-2: Opportunity Sites within the Quarter-Mile Station Areas

	Sites	Acreage
Northgate	2	36.1
Roosevelt (2)	148	19.6
Roosevelt (3)	157	20.9
Roosevelt (4)	134	18.4
NE 45th Street	84	18.9
Campus Parkway	56	8.3
Pacific Street	1	.5
Broadway at Roy	131	15.7
Capitol Hill	144	16.9
First Hill	64	21.8
Eastlake	51	11.6
South Lake Union	65	36.1
Seattle Center	67	18.9
Convention Place	117	28.1
Westlake	106	22.5
University Street	18	3.9
Pioneer Square	45	7.7
International District	110	31.5
E3/Royal Brougham	4	2.0
Lander	5	6.5
Poplar Place	126	17.3
I-90[1]	127	15.6
McClellan[1]	47	8.2
Beacon Hill	52	8.4
Rainier Valley Square	164	26.5
Genesee	71	8.9
Columbia City	69	11.6
Alaska	79	10.9
Edmunds	105	15.9
Graham	132	41.6
Othello	37	14.8
Henderson	106.	28.0
[1]*For both potential station areas*		

- *Neighborhood Commercial.* The NC zones (NC2, NC3) allow a wide variety of general commercial uses (*including auto-oriented sales and services*). Regulations for mixed use residential development require that 80% of a structure's street-level, street-fronting facade be occupied by non-residential uses. Housing is encouraged in mixed use development because residential use is not subject to density limits. Mixed use is also encouraged by allowing additional height in zones with 30 or 40-foot height limits. Structures above 65 feet in NC3 zones have FAR incentives for mixed use development.

- *Commercial.* The C zones (C1, C2) allow a wide variety of general commercial and manufacturing uses and are *generally intended to accommodate auto-oriented activities.*

- *SF 5000.* This general single-family residential zone, found throughout many of the station areas, allows low-density, detached single-family dwellings.

- *Lowrise Multi-Family Residential.* The LDT, L-1, L-2 and L-3 zones allow for residential uses in a variety of multi-family building types. Mixed use development (i.e., with ground-floor retail) is only allowed in areas with an RC designation.

- *Midrise Multi-Family Residential.* The MR zone permits high-density residential uses. Specified ground-floor commercial uses are permitted in MR areas within one block of a commercial zone.

- *Highrise Multi-Family Residential.* The HR zone permits high-density residential uses, with specified commercial uses permitted on the ground floor.

Higher-density living is generally more supportive of transit use – more people are willing to substitute transit for automobile trips. Neighborhood commercial zones are also more conducive to transit and walking because they allow for mixed use development with ground-floor retail uses. Even so, the provisions of these zones can be modified to provide greater incentives for mixed use development in station areas and to place additional limits on auto-oriented uses to better support pedestrian activity and transit use.

Opportunities

Zoning regulations can be made more supportive of pedestrians and transit users by revising provisions for mixed use development, limiting auto uses, and adding provisions for pedestrian-sensitive streetscapes. Opportunities include the following:

- *More Focused Incentives for Mixed Use.* Current FAR incentives for mixed use are part of land use regulations for NC3 zones where height limits exceed 65 feet. Development incentives could be limited specifically to the immediate station area, creating an incentive within the local neighborhood market that favors development near the station over development farther away. For instance, a mixed use structure in NC3 zones (maximum height of 85 or 125 feet) would normally be allowed an FAR of 6.0. The allowable FAR could be increased to 7.0 for projects located within a 1,400-foot radius (approximately one-quarter mile or a five-minute walk) of a light rail station.

- *Fewer Auto-Oriented Uses.* Currently, NC zones allow structures up to 25,000 square feet for fuel sales, sales services, and rental of commercial equipment and structures up to 15,000 square feet for warehouse uses. Such auto-oriented uses should be prohibited in station areas. Wherever a Pedestrian Overlay Zone (POZ) is expanded, auto-oriented

uses will automatically be prohibited. For instance, gas stations and drive-in businesses are permitted in NC zones, but not where there is a POZ. In areas without a POZ, a Transit Overlay Zone could provide the desired limitation on auto-oriented uses.

PARKING AND THE PEDESTRIAN ENVIRONMENT

The existing transportation network in most potential station areas strongly favors the automobile. Except for some stations in Southeast Seattle, most station areas have easy access to either I-5 or I-90. In addition, arterial streets allow for high-speed travel between adjacent neighborhoods. The limited supply of parking gives pedestrian travel and transit use a measure of advantage in some neighborhoods, particularly near Downtown. Only a few neighborhoods (e.g., Downtown, the University District, Capitol Hill, and First Hill) are conducive to walking and biking.

Parking

Review of neighborhood planning work and interviews with stakeholders confirmed a widely-held perspective that parking availability is constrained in many neighborhoods. Parking management strategies can address the needs and concerns of residents, employees, and retail customers in selected station areas. Moreover, available parking in many station areas limits parking at potential stations. Space constraints in the Downtown station areas encourage transit use. Similarly, congestion and limited Kingdome parking encourages some people to use transit to attend sports events.

Pedestrian Environment

Station areas vary widely in the degree to which they already support pedestrian and bicycle trip-making. Some station areas, like Capitol Hill, have pedestrian-oriented streets that encourage walking. Other station areas, like those in the Duwamish and Southeast Seattle segments, are predominantly oriented to the automobile. Key characteristics that make up pedestrian-supportive environments include:

- *Land Use Mix*. The right mix of land uses encourages pedestrian activity. For example, the ground-floor retail uses in the University District encourage walking along the street. A mix of retail and high-density residential development also creates conditions favorable to walking. In contrast, industrial uses in the Lander station area are more conducive to the mobility needs related to freight and goods.

- *Density*. Compact development tends to encourage more pedestrian activity because goods and services are located close together, making it easier to run errands on foot. The high-density commercial and residential development in the Downtown, First Hill, and Capitol Hill station areas generates pedestrian activity, whereas the lower density residential and commercial uses in the Southeast Seattle station areas attract fewer pedestrians.

- *Physical Barriers*. In some cases, physical barriers can prevent effective pedestrian movement. For example, the steep hill west of Martin Luther King, Jr. Way at Alaska and Edmunds Streets creates a barrier to/from Beacon Hill. Similarly, Portage Bay creates a barrier between the Pacific Street station and the residential areas to the south. Even though

the residential area is within a quarter mile of the station, pedestrian access to it would require crossing bridges outside the station area, requiring a walking trip in excess of one mile or twenty minutes.

- *Traffic*. Traffic can limit pedestrian activity within a neighborhood. In the Rainier Valley, heavy traffic that is not controlled to allow convenient pedestrian crossings on Rainier Avenue South and Martin Luther King, Jr. Way limits pedestrian connections between the west and east sides of station areas.

- *Facilities.* In some neighborhoods, the lack of pedestrian-supportive facilities, such as sidewalks, curb ramps, adequate street lighting, benches, and signs prevents effective pedestrian connections to station areas. In the Northgate neighborhood, weak pedestrian linkages between the Northgate Transit Center, the proposed station site, and the Northgate Mall do not permit easy pedestrian movement.

Opportunities

Station areas can become more supportive of pedestrians and transit users if (1) the conditions that make walking easy and enjoyable are improved, and (2) more restrictions are placed on the automobile orientation of station areas. Automobiles should not be prohibited from station areas, however, these areas should *favor* pedestrian and transit use in balance with automobile travel.

- *Land Use Mix and Density*. Zoning provisions can be modified to allow for land uses and densities that are more conducive to pedestrian activity. Strategies may include ground-floor retail uses and higher-density residential development (See Land Use section above).

- *Traffic-Calming Measures and Parking Management.* Traffic-calming measures (e.g., narrow streets, stop signs, special street treatments, and traffic diverters) can help slow traffic in station areas to favor pedestrian mobility. Parking management can help control the availability of parking for transit riders and, therefore, give motorists an incentive to walk, bike or take transit to/from the station areas. It also can encourage shared parking facilities and limited development of appropriate parking facilities.

- *Pedestrian Facilities*. Improved streetscapes, street trees, lighting, walkways, reduced street crossing distances, crossing signal timing, and other facilities can help create an environment that is more conducive to walking.

URBAN DESIGN OPPORTUNITIES

Some station areas have key urban design assets (e.g., major activity centers, landmarks, and views) that should be protected and enhanced, while some station areas have features that detract from the visual quality or pedestrian mobility in the area. Urban design strategies can support community assets and help reduce the impacts of negative features on the function of station areas. Specifically, barriers to pedestrian activity can be minimized through consistent pedestrian paving, lighting, and streetscapes across barriers. Such facilities can help bridge the Roosevelt and Greenlake neighborhoods through the Interstate 5 underpass at NE 65th Street.

Some examples of urban design assets include:

- *Major Activity Centers or Corridors.* Key activity centers are not only centers of specific types of land uses, but function as important places in the community. For example, the Broadway shopping district in Capitol Hill is not only an area of retail uses, but a key visual and popular cultural element of the neighborhood.

- *Landmarks.* Landmarks include major elements in the visual landscape of a station area. Franklin High School, situated on a hill and marked by distinctive architecture, is a key public landmark just outside the McClellan station area. Northgate Mall is also a key visual landmark in the landscape of the Northgate station area.

- *Views.* Many station areas, such as Beacon Hill, have views of Downtown and waterfront areas.

Opportunities

Urban design strategies for station areas should build on neighborhood plan visions, as well as existing assets of station areas.

- *Enhance Major Activity Centers.* Major activity centers can be visually enhanced with urban design elements that emphasize their importance in the urban landscape. Entrances to station areas can be marked with banners, artwork, or distinctive streetscapes. Landscaping, paths, lighting, and special design features on buildings (cornice lines, fenestration, awnings) can help create a special station area character.

- *Improve Pedestrian Mobility.* Streetscape improvements can link major activity centers with transit stations, bridge barriers to pedestrian mobility, and help promote pedestrian activity.

- *Protect Key Landmarks and Views.* New development can frame, rather than obscure, important landmarks and views so that major elements of station areas are enhanced.

- *Promote Design Character.* New development can promote the special design character of each station area.

RECENT DEVELOPMENT ACTIVITY

Recent market trends and development activity, as well as the relative market strength of a station area, indicate its relative ability to support new housing, retail, or office development. Every station area can support some mix of housing, retail, and office development, but some station areas have stronger current markets for particular types of development. Other station areas present different challenges to overcome weak market conditions and will require more policy development, public support, and investment to spur more transit-supportive development.

- *Housing.* Station areas with the strongest housing markets include desirable residential neighborhoods, such as Capitol Hill and First Hill. Most other station areas have at least a low to moderate market strength for housing. Exceptions are the potential stations in the Duwamish industrial area (where housing is prohibited by zoning) and station areas located near the I-90 right-of-way.

Table 6-3: Rents, Vacancies, and Market Strength

	Apartments		Office		Active Permits		Market Strength[1]		
	Rents	Vacancies	Rents	Vacancies	Residential (units)	Commercial (sq. ft, 000s)	Housing	Retail	Office
Northgate	$0.85	2.5%	$18.53	7.0%	150	-	2	5	3
Roosevelt (2)	$1.09	1.3%	$18.53	7.0%	97	194	3	3	2
Roosevelt (3)	$1.09	1.3%	$18.53	7.0%	84	192	3	3	2
Roosevelt (4)	$1.09	1.3%	$18.53	7.0%	84	192	3	3	2
NE 45th Street	$0.96	1.8%	$18.53	7.0%	39	200	3	3	3
Campus Parkway	$0.96	1.8%	$18.53	7.0%	143	9	3	3	3
Pacific Street	$0.96	1.8%	$18.53	7.0%	-	550	3	2	3
Broadway at Roy	$1.03	1.3%	N/A	N/A	44	61	4	3	2
Capitol Hill	$1.03	1.3%	N/A	N/A	53	2	4	3	2
First Hill	$1.03	1.3%	N/A	N/A	97	61	4	3	3
Eastlake	$1.25	3.9%	$21.42	3.2%	-	-	3	1	2
South Lake Union	$1.25	3.9%	$21.42	3.2%	229	4	3	2	3
Seattle Center	$1.25	3.9%	$18.38	1.7%	989	452	2	3	2
Convention Place	$1.25	3.9%	$25.83	2.8%	615	-	3	5	4
Westlake	$1.25	3.9%	$25.83	2.8%	751	-	2	5	4
University Street	$1.25	3.9%	$25.83	2.8%	687	-	2	3	5
Pioneer Square	$1.25	3.9%	$17.52	4.8%	32	-	2	3	4
International District	$1.25	3.9%	$17.52	4.8%	171	-	2	3	2
E3/Royal Brougham	N/A	N/A	N/A	N/A	-	-	1	2	2
Lander	N/A	N/A	N/A	N/A	-	-	1	2	2
Poplar Place	$0.71	6.0%	N/A	N/A	-	9	1	1	1
I-90 (21)	$0.71	6.0%	N/A	N/A	-	9	1	2	1
I-90 (28)	$0.71	6.0%	N/A	N/A	-	9	1	2	1
McClellan (22)	$0.71	6.0%	N/A	N/A	-	-	1	2	1
McClellan (23)	$0.71	6.0%	N/A	N/A	-	-	2	4	1
Beacon Hill	$0.71	6.0%	N/A	N/A	-	-	3	2	1
Rainier Valley Square	$0.71	6.0%	N/A	N/A	-	-	2	3	1
Genesee	$0.71	6.0%	N/A	N/A	-	23	2	2	1
Columbia City	$0.71	6.0%	N/A	N/A	-	-	2	2	1
Alaska	$0.71	6.0%	N/A	N/A	-	-	2	2	1
Edmunds	$0.71	6.0%	N/A	N/A	-	-	2	2	1
Graham	$0.71	6.0%	N/A	N/A	-	-	2	1	1
Othello	$0.71	6.0%	N/A	N/A	-	-	2	1	1
Henderson	$0.71	6.0%	N/A	N/A	-	-	1	1	1

1. *Relative strength of market type of the station area compared to other potential Seattle station areas. Ranking is based on rents, employment levels, vacancy rates, land values, recent development activity, stakeholder interviews, field observations, and other information.*

- *Retail.* Station areas with strong retail markets are Northgate, Convention Place, and Westlake. In addition, the McClellan station can support retail development. Most station areas can support some retail development to meet local shopping needs.
- *Office.* Office markets are strongest around the Downtown stations, particularly near the University Street station. Station areas to the north of Downtown have at least a moderate ability to support new office development, while stations south of Downtown and in the Rainier Valley have little potential to support office development.

FOR FURTHER INFORMATION

For detailed descriptions of existing conditions at particular station areas, refer to Chapter 10 of this Report and the Station Area Atlas, which includes analyses of existing conditions and opportunities/constraints, as well as potential development strategies for each station area in Seattle's light rail system.